

IN THE CLAIMS:

Claims 1-3 and 6 have been amended herein. Claims 7-10 are added. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application. All amendments are made without prejudice or disclaimer.

Listing of Claims:

1. (Currently amended) A method of delivering a nucleic acid of interest to a fibroblast-like or a macrophage-like cell *in vitro*, said fibroblast-like or a macrophage-like cell being isolated from a synovial cavity, the method comprising:
providing a recombinant adenovirus of subgroup C comprising the nucleic acid of interest and having a tissue tropism for fibroblast-like or macrophage-like cells, wherein the capsid of said recombinant adenovirus comprises at least one protein of an adenovirus serotype of subgroup C and at least the tissue tropism determining domain of a fiber protein of a second adenovirus serotype, said second adenovirus serotype being from the group consisting of: adenovirus serotype 11, 16, 35, and 51; and
infecting a fibroblast-like or a macrophage-like cell, said fibroblast-like or a macrophage-like cell being isolated from a synovial cavity, with said recombinant adenovirus.

2. (Currently Amended) The method according to claim 1, wherein said adenovirus of subgroup C is of adenovirus serotype 5.

3. (Currently Amended) The method according to claim 2, wherein said recombinant adenovirus comprises an adenovirus serotype 5 genome, wherein a sequence normally encoding the tissue tropism determining domain of the fiber protein of serotype 5 ~~is replaced by~~ instead comprises a sequence encoding the tissue tropism determining domain of the fiber protein of said second adenovirus serotype.

3. (Original) The method according to claim 3, wherein said recombinant adenovirus comprises at least one deletion in the E1 or the E3 region, where the nucleic acid of interest is inserted or can be inserted.

4. (Original) The method according to claim 1, wherein said nucleic acid of interest encodes a gene product selected from the group consisting of: the Herpes Simplex Virus thymidine kinase, an apolipoprotein, a nitric oxide synthase, interleukin-3, interleukin-1RA, interleukin-1alpha, an (anti)angiogenesis protein, an anti-proliferation protein, a Vascular Endothelial Growth Factor (VEGF), a basic Fibroblast Growth Factor (bFGF), a hypoxia inducible factor 1alpha (HIF-1alpha), PAI-1, a smooth muscle cell anti-migration protein, erythropoietin (EPO), CD40, FasL, interleukin-12, interleukin-10, interleukin-4, interleukin-13, an excreted single chain antibody to CD4, CD5, CD7, CD52, interleukin-2, interleukin-1, interleukin-6, tumour necrosis factor (TNF), an excreted single chain antibody to a T-cell receptor on auto-reactive T-cells, a dominant negative mutant of promyelocytic leukemia (PML), an antagonist of inflammation promoting cytokines, Bcl3, VP3 of chicken anemia virus, cytosine deaminase, nitroreductase, and linamerase.

6. (Currently amended) An ~~*in-vitro*~~ isolated fibroblast-like or a macrophage-like cell having been ~~provided with a nucleic acid of interest~~ produced by the method of claim 1.

7. (New) The method according to claim 1, wherein said fibroblast-like cell is selected from the group consisting of fibroblast-like synoviocytes, type B synoviocytes, and fibroblast-like type B cells; and

wherein, said macrophage-like cell is selected from the group consisting of fibroblast-like synoviocytes, type A synoviocytes, and macrophage-like type A cells.

8. (New) The method according to claim 1, wherein said macrophage-like cell is a macrophage cell; and

wherein said fibroblast-like cell is a fibroblast cell.

9. (New) A method of delivering a nucleic acid of interest to a cell *in vitro*, the method comprising:

isolating a synovial cell from a subject; and

infecting said isolated synovial cell with a recombinant adenovirus of subgroup C comprising a nucleic acid of interest, wherein said recombinant adenovirus' capsid comprises at least one protein of an adenovirus serotype of subgroup C and at least the tissue tropism determining domain of a fiber protein of a second adenovirus serotype, said second adenovirus serotype selected from the group consisting of adenovirus serotype 11, 16, 35, and 51.

10. (New) The method according to claim 9, wherein said isolated cell is selected from the group consisting of type A synoviocytes and type B synoviocytes.